

Newsletter

March 2023



Enhanced harmonisation and consistency for Euribor®



Dear subscribers,

Spring always comes with a fair share of new developments and challenges. This year is no exception, and we have several endeavours in our pipeline, some of which I am happy to

share already with you in this 5th issue of our newsletter.

After consulting extensively with our 19 Panel Banks, we are pleased to announce that The European Money Markets Institute is now initiating an ambitious project to centralise the calculation of Euribor® Level 3 contributions at the Administrator. At this stage, we are finetuning and analysing thoroughly our favoured scenario. Market participants – and all relevant stakeholders – will of course be consulted in due time to collect their feedback.

The ultimate goal of the project is to facilitate our Panel Banks' contributions to Euribor® by alleviating their burden and costs. In turn, such a change could convince additional banks to join the Euribor® panel, thus further strengthening its robustness and representativeness. The rationale behind the project is also to enhance further the consistency and transparency of the benchmarkdetermination methodology for Level 3 contributions.

You will undoubtedly be provided with regular updates on this challenging initiative that The European Money Markets Institute is embracing.

In the context of the current monetary policy tightening moves by the ECB, we also would like to offer you the opportunity to read about the latest key market events related to Euribor® in Q4 2022. The Euribor® Transparency Indicators in this edition cover the period from October 2022 to January 2023.

In this edition, you can also read about the reasons that motivated Raiffeisen Bank International (RBI) to become the 19th bank joining the Euribor® Panel and learn, among others, about their experience with the onboarding process.

We invite you furthermore to read the article on EFTERM®, our new fallback rate which helps Euribor® users to comply with the relevant legal requirements under the EU Benchmark Regulation. In this piece we explain, for instance, how we have determined the benchmark rates since its launch in November 2022.

I wish you a pleasant reading and look forward to meeting you again in our next edition.

Kind regards,

Jean-Louis Schirmann

CEO – The European Money Markets Institute



Centralised calculation of Euribor[®] Level 3 contributions at Administrator Level

March 2023

In October 2021, The European Money Markets Institute informed about its intention to explore potential ways of centralising – at Administrator level – the calculation of Level 3 contributions under the Hybrid Methodology for Euribor[®].

Since the announcement, considerable work took place, also involving the 19 banks belonging to the Euribor[®] panel with extensive bilateral contacts and group meetings to collect their respective views as to the different scenarios contemplated.

This initiative is a major development for Euribor[®] and for the banks in the panel. Its main objective, provided successful completion of the project, is to facilitate Panel Banks' contributions to the benchmark by alleviating their burden and costs.

This favourable development could furthermore convince additional banks to join the Euribor[®] panel. This would, in turn, reinforce further the benchmark's representativeness of a diversified landscape, and its adequate reflection of the euro wholesale funding market.

The project relies on two features:

1. To provide a harmonised, consistent and transparent calculation methodology in line with Euribor's underlying interest. For their Level 3 contributions, the 19 banks in the Euribor[®]

panel currently use specific input data, and tailor-made modelling techniques depending on their own funding situation. These would be replaced to consistently reflect each Panel Bank's unsecured funding cost even on days when no eligible transaction is available.

2. To propose a model for Level 3 contributions calculated centrally and independently by The European Money Markets Institute. To achieve this goal, The European Money Markets Institute would collect any additional data that might be required. As Level 3 contributions account for an important share of the determination of Euribor[®] rates, this independent, rigorous and centralised calculation of Level 3 contributions would reduce any risk of attempted fraudulent manipulations even further.



Several approaches for the centralised calculation of Level 3 contributions have been contemplated and thoroughly assessed. At this stage, our favoured working scenario integrates:

- Each Panel Bank's cost of funding
- An interest rate change component
- A credit risk change component

For any given Euribor® tenor, the Panel Bank contributions from the previous day would be considered as the basis for the calculation of Level 3 contributions when needed. In such a situation, the previous day contribution would be adjusted using the corresponding change in interest rates, as well as a change in the credit spread.

The baseline scenario for the centralised calculation of Level 3 contributions is still work in progress, and we are currently finetuning, based on in-house research supported by data-fed analyses.

Needless to say that, prior to implementation, the methodology that will ultimately be selected will be submitted to all relevant stakeholders for final validation and approval.

In this view, we plan to launch a public consultation in Q3 of this year to collect their insights, before an expected implementation in 2024.

More information shall be provided in the next releases of our newsletter.

Echoes from the euro money markets

March 2023

Key events closely related to Euribor®

Money market developments were impacted by a number of changes in the European Central Bank's monetary policy decisions.

In an environment dominated by high inflation and significant risks of further inflationary pressures to develop, the ECB has raised its key interest rates at five occasions since July 2022, for a total of 300 basis points, bringing the Deposit Facility rate, the Main Refinancing rate and the Marginal Lending Facility rate to 2.50 percent, 3.00 percent and 3.25 percent respectively. Furthermore, the ECB indicated already its intention to raise its key rates by 50 bps again at its March monetary policy meeting.

Concerning its asset purchase programs, while confirming that it will keep reinvesting the redemptions coming from the Pandemic Emergency Purchase Program (PEPP) until at least the end of 2024, the ECB decided to reduce the Asset Purchase Program (APP) holdings by 15 billion euro on average per month between March and the end of June. The subsequent pace of reduction of APP holdings will be determined over time.

With regards to the Targeted Longer-Term Refinancing Operations (TLTRO) a total of EUR 36.6 billion were repaid early on 22 February 2023, reducing further the excess liquidity in the market. Based on the Survey of Monetary Analysts (SMA), at the next repayment window in March 2023, banks

are expected to repay further EUR 125 billion (This number also includes the repayments coming from the maturity of TLTRO III.3). The total outstanding amount of the third series of TLTRO should drastically reduce on June 2023 due to the maturity of the largest operation (TLTRO III.4).

All in all, while still at very high levels (EUR 4.15 Trillion) excess liquidity as illustrated in chart 1 is gradually declining.

Chart 1 – Excess liquidity



Source: ECB; RHS values in millions; LHS values in trillions

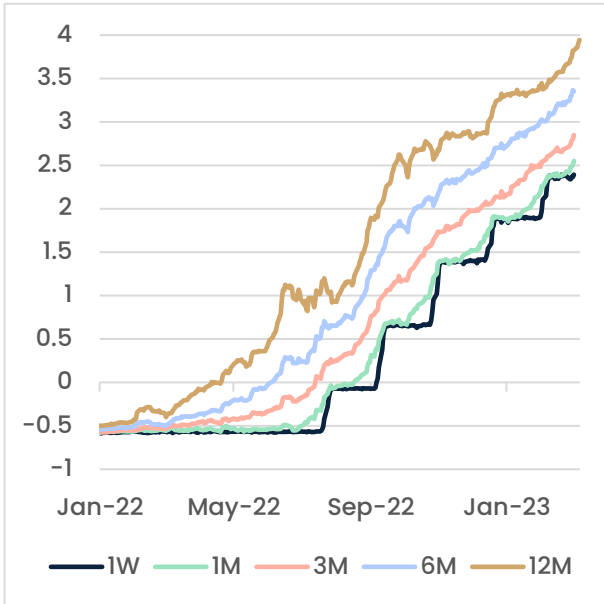
Euro money markets developments & Euribor® rates

Money market rates, including Euribor, experienced a strong increase reflecting both changes in ECB interest rates and further rate hike expectations.

1-week Euribor® is tracking very closely the ECB key interest rates and currently stands at 2.38%. Other Euribor® maturities have also experienced a significant increase, pushing for instance the 12

month Euribor® rate up to 3.94%¹. The steepness of the Euribor® curve suggests that market participants are still expecting further interest increases in the course of 2023.

Chart 2: Euribor® rates

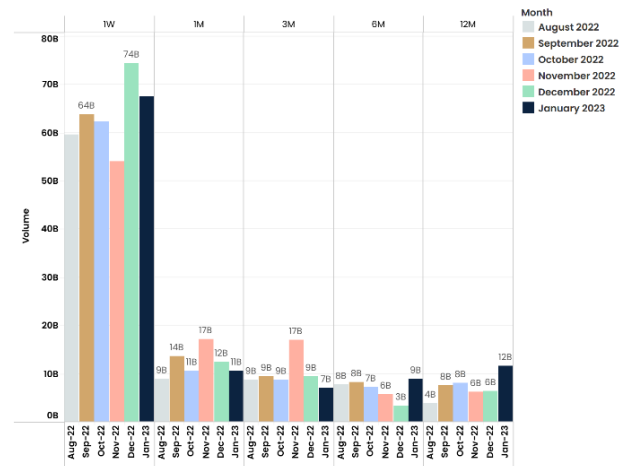


Source: The European Money Markets Institute

Such an environment of raising interest rates combined with a decrease in excess liquidity resulted in more activity in the euro money market. For instance, volumes and number of transactions used in the determination of Euribor® have increased as depicted in the chart 3.



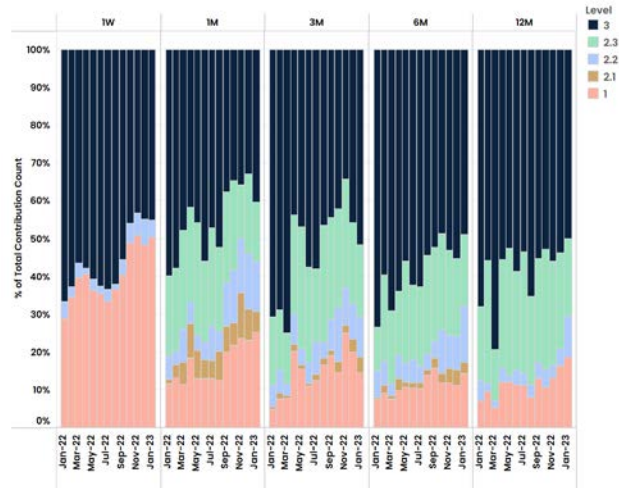
Chart 3: Euribor® underlying volumes



Source: The European Money Markets Institute

As a consequence, the share of Level 1 and Level 2 in the calculation of Euribor® increased over time while the share of Level 3 decreased.

Chart 4: Use of each level of the Hybrid Methodology



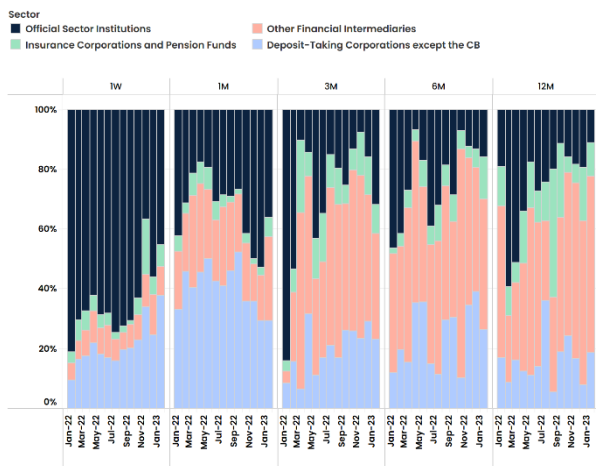
Source: The European Money Markets Institute

The sharp and rapid rise in interest rates was more pronounced on the derivatives market and in particular in the OIS segment. As a result, at the

¹ Reference date: 8th of March 2023

shorter end of the curve, up to 3-months maturities, the spreads between Euribor® and OIS have turned negative. This reflects the different nature of both instruments. On the one hand OIS are used actively for hedging and speculative purposes in such a market environment while on the other hand Euribor®, which is reflecting the wholesale funding costs of European banks, illustrates both the little appetite for liquidity at the shorter end of the curve and the diversity of funding sources.

Chart 5: Counterparty sector share of volume in Euribor

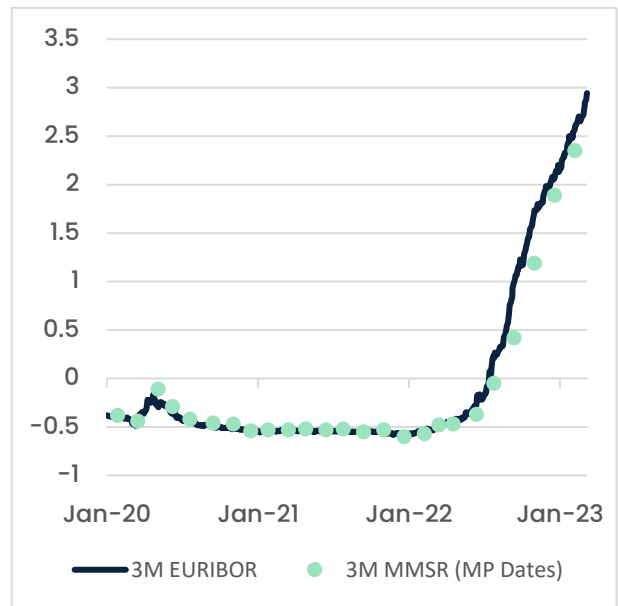


Source: The European Money Markets Institute

In a consistent manner over different time periods covering both negative and positive interest rates, Euribor® has proven to be representative of its underlying interest, as illustrated by chart 6 which compares the 3-month Euribor® to MMSR 3-months average borrowing rates for MP dates² since January 2020.

² Euro money market - Unsecured market - All sectors other than households and NPISH - Borrowing - Weighted average rate - 3 months (tenor)

Chart 6: 3-month compared to MMSR data.



Source: ECB, The European Money Markets Institute



First four months of EMMI's forward-looking fallback rate EFTERM[®]

March 2023

On 14 November 2022 EMMI launched EFTERM[®], the first €STR-based forward-looking term rate. Based on a waterfall methodology, EMMI provides EFTERM[®] free of charge to all its subscribers as part of the EMMI Data Package through major data vendor distribution channels. In this way, all licensed EURIBOR[®] users that are supervised entities in the EU, can use EFTERM[®] as a fallback rate in their contracts and comply with legal requirements. The European Money Market Institute has appointed ICE Benchmark Administration[®] as the calculating agent for EFTERM.

EFTERM[®]'s waterfall methodology consists of three levels. €STR OIS bid and offer prices and volumes form the basis for the first two levels and €STR-linked futures settlement prices are the foundation for a last fallback level. EMMI has published EFTERM[®] on the basis of a consistently large daily amount of dealer-to-client bid and offer prices and volumes (Level 2 of the EFTERM[®] waterfall methodology) since the day it was launched. The benchmark has proven robust for its abundance of Level 2 input data. EMMI will include tradeable €STR OIS bid and offer prices and volumes (Level 1 of the EFTERM[®] waterfall methodology) as soon as these are robustly quoted by market participants and thoroughly tested by EMMI.

The EFTERM[®] Oversight Committee, a diverse group of highly skilled professionals, already met twice since the launch of the benchmark. The Committee's composition and their Terms of Reference are available on EMMI's website.

ICE Benchmark Administration Limited (IBA) is EMMI's calculation agent for EFTERM. Input data for EFTERM is provided "as is" by data providers. IBA, data providers and its and their affiliates owe no duty of care to users or recipients of EFTERM and will not be liable to users or recipients of EFTERM in relation to EFTERM or the input data in any way whatsoever, whether under tort, contract, misrepresentation, restitution, breach of statutory duty, or otherwise under any applicable law save for any liability which by law may not be excluded. None of IBA, any data providers, or any of its or their affiliates make any claim, prediction, warranty, or representation whatsoever, express or implied, in relation to EFTERM, the input data, or the appropriateness, suitability, or fitness of EFTERM or the input data for any particular purpose to which it might be put and all warranties and representations of any kind, express or implied, are excluded.

RBI as a Euribor® Panel Bank - Mission accomplished

March 2023

On 2 November 2022, The European Money Markets Institute welcomed the Austrian **Raiffeisen Bank International AG** (RBI) as a new member of the Euribor® Panel, the group of credit institutions that contribute to the calculation of Euribor®. The inclusion of RBI in the Panel was a major development as it has diversified and expanded the profile of contributors geographically. This, in turn, has increased further the representativeness of Euribor®.

Four months have passed since RBI was integrated in the Panel. They have kindly accepted to explain their motivations to join, and to share with you their insights in their onboarding process.

The floor is theirs.



When the discussions on new risk-free rates like €STR and SOFR began a couple of years ago, it was evident for Raiffeisen Bank International (RBI) that Euribor® should continue to exist. While relying on the contributions of the already existing 18 Panel Banks was one option, supporting this critical benchmark with input data from RBI seemed to us an even better one. This mindset was also supported by our parent banks within the Austrian Raiffeisen Banking Group.

“Euribor® is a paramount benchmark for various types of financial contracts and thus essential for the entire financial industry. Therefore, we decided to represent the Austrian market by becoming the country’s first bank to contribute to Euribor’s Hybrid Methodology,” said **Hannes Mösenbacher**, Chief Risk Officer at RBI.

The project *RBI as a Euribor® Panel Bank* encompassed three main focus areas:

- To fully understand and capture the legal and regulatory requirements associated with the status of a Euribor® Panel Bank
- To design a comprehensive internal governance framework, and
- To implement an automated, audited and technically supported workflow

RBI’s technical and organisational successful onboarding was based on the re-use of existing IT environments and of established structures, teams, and processes. Ultimately, we succeeded in building a comprehensive, streamlined and very stable environment, both on due time and within budget.

The collaboration with The European Money Markets Institute for the interpretation of the legal and technical requirements was intense and very supportive, and the agile approach helped us understand all factors very quickly.